TRANSACTIONS OF THE CHICAGO SURGICAL SOCIETY.

Stated Meeting, March 5, 1902.

ALEXANDER HUGH FERGUSON, M.D., in the Chair.

THREE HUNDRED AND TWENTY-EIGHT OPERATIONS UPON THE GALL-BLADDER AND BILE PASSAGES.

DR. WM. J. MAYO read a paper with the above title, for which see page 732 of June number of ANNALS OF SURGERY.

INDICATIONS FOR THE SURGICAL TREATMENT OF GALL-STONES.

DR. ARTHUR DEAN BEVAN said that in considering the indications for surgical intervention one should take a judicial position. He could not agree with such advanced surgeons as Winiwarter and Richardson, or with those surgeons who say that whenever a diagnosis of gall-stones is made, a surgical operation is indicated. He could not agree with that statement because of his analysis of post-mortem cases. In his own dissecting-room material he had 16 per cent. of gall-stone cases during a large number of years, and he thought, as a general proposition, it would be safe to say that from 8 to 10 per cent. of the adult population in most communities had gall-stones. Taking this approximate statement, it at once led to the conclusion that a great number of cases were instances in which the gall-stones were innocuous. There were, on the other hand, a great many cases where the individuals suffered little inconvenience from a single attack of gall-stones, and of the entire population this group of cases would be a considerable number. With our knowledge of the causation of the symptoms in gall-stones, he did not think it would be fair to urge operation in all cases manifesting slight symptoms.

In discussing the surgical indications one must keep in mind the causes. He was willing to accept the statement that a great majority of the symptoms are not produced by mechanical causes, pure and simple, but from infections, and that these infections occur either indirectly or directly from the intestinal tract. This explained the great value of the Carlsbad treatment, the olive oil treatment, or other forms of treatment which were used. However, he thought that no form of treatment really could dissolve gall-stones *in situ,* but continued Carlsbad treatment was of value in preventing repeated attacks of infection from the intestinal tract, and that therefore it was rational and to be advocated in a large number of cases. To-day, however, with the very brilliant results that had been obtained by surgical treatment, with the very low mortality resulting from it in expert hands, the indications for operation were much wider than they ever had been.

He thus summarized his idea of the surgical indications:

(1) Cases in which there is obstruction of the cystic duct, either the direct or indirect result of gall-stones, demand surgical intervention.

(2) Cases where there is obstruction as the direct or indirect result of continuous or intermittent attacks demand surgical intervention.

(3) Cases where there is perforative inflammation of any part of the bile tracts, including the gall-bladder, demand surgical intervention.

This left a large group of cases where there were no symptoms of obstruction of either the cystic or common duct, or a perforative inflammation, but symptoms in the majority of cases of gall-stones remaining in the gall-bladder. In a considerable group of cases the stones still remain in the gall-bladder without a typical picture of gall-stone colic. Such patients visit for years physician after physician, and many of the cases have been diagnosed as dyspepsia or gastric neuralgia, and the patients are chronic invalids. Medical men are beginning to recognize this group of cases and recommending surgical intervention. Another group of cases is where the patients have gall-stones, probably recognized, but in whom the attacks are infrequent. These cases require the combined judgment of the internist and of the surgeon as to the desirability of surgical intervention.

REAL AND APPARENT RECURRENCES AFTER GALL-STONE OPERATIONS.

DR. E. WYLLYS ANDREWS discussed this phase of the subject. Do gall-stones ever reproduce themselves after operation? Or, Does the removal of gall-stones fail to cure the patient who has them? These were two very different questions, and might require opposite answers. He thought now he believed less in stone reproduction than formerly. What he expected to find, now that his experience was much greater, was not often new stones in the bladder or ducts, but old ones purposely or accidentally left, or else kinking of the cystic duct, stenosis from carcinoma, adhesions, or other mechanical cause for hydrops of the gall-bladder. But of apparent recurrences, numerous instances did occur. They had come to him from nearly every surgeon hereabout. He had no doubt cases he thought cured which had gone to other men, and he had seen recurrences of pain under his own continuous observation. Formerly he thought and taught that gall-stones would reproduce *a priori,* as urinary bladder and kidney calculi were known to do so, and, as a large percentage of well people had gall-stones, this would seem probable. After reading the careful and positive statements of Courvoisier, Riedel, Kehr, and others, he searched carefully in his records, and could not find one unmistakable case of stone reproduction, *i.e.,* one in which an overlooked stone, ulcer, or cancer of the gall tracts, old adhesions, or some other cause might not explain the recurrence of symptoms. These writers, particularly Kehr, attempted to ridicule the idea of stone reproduction after operation, and Kehr states that many foolish things are said by physicians and patients on this subject. He declares it laughable what troubles are classed as recurrence of gall-stones, and makes fun of those who think that a gall-stone operation should insure the patient against colic after eating sauer-kraut, intercostal neuralgia, and the pain of enteroptosis or wandering kidney. This seemed like a partisan attitude; still, he defines very exactly what a return of gall-stones really is as distinguished from a return of symptoms, and this very positive statement based on so large a number of cases must command respect. Riedel says that gall-stone reproduction does not occur because the drainage cures the gall-bladder inflammation and stops their formation. Even if a few

are left, they come out on the dressings. Dr. Andrews thought this was bad teaching if it led to superficial work. It was the exact opposite of what Dr. Fenger's example would lead to. It also took no account of choledochus stones, which never would come out if left alone. Riedel also states that he has operated twelve years on gall-stones, and never had a real reproduction of stones. Kehr in one thousand cases of his own and Riedel had no proved case of reproduction. He thinks gall-stone reproduction is an occurrence usually which takes place once in a lifetime. The speaker bowed to such authorities as these, but insisted that the apparent or symptomatic recurrences were far more rare.

Leaving out of account diseases of neighboring parts, such as the kidney, ureter, cæcum, or appendix, all of which might give pain like hepatic colic, there was quite a list of postoperative troubles of the gall tracts themselves which surgeons were powerless to prevent, and which might defeat all efforts at relief. Among these were adhesions to viscera and anterior wall; hernia in drainage scar; cholecystitis, still uncured; stones accidentally left, and stones knowingly left. Stones were very unsatisfactorily felt when the gall-bladder was not opened. Those surgeons who did the two-step operation often knew very little of how many should come out later. There always would be a few cases to be operated on in the most conservative and rapid manner, and with a minimum of anæsthetic or local anæsthesia. The aim in doing an incomplete operation was to relieve the cholæmia, and later complete the operation. Stones intentionally left were not recurrences; stones accidentally left were, it was to be hoped, less common than at first. He would state it as his observation that this had occurred oftener in the past than the rose-colored views of some operators would lead one to think. As he looked back on his earliest work, before the common duct operation was elaborated by Fenger, he could think of several cases lost through inefficient search, and the now discredited idea of crushing stones through the duct wall. Some of these continued to have jaundice after the gall-bladder had been cleared of numerous stones. Naunyn was less certain than Kehr and Riedel, but thought that stones may reform. Hermann reports a case operated upon by Körte, which had a return of jaundice and colic, and was cured by Carlsbad treatment.

It was unfair to demand more of surgeons than a good

majority of cures. Internists with the Carlsbad cure only succeeded in reducing the stones to a quiescent or sleeping state. We did not in any operation get a uniform series of cures. This was true of kidney work, operations on the uterus and appendages, or on the appendix, but this did not discredit the operation. The only thing which could discredit any operation was a failure to report bad as well as good results, so that false statistics gained currency.

The treatment of complications causing recurrence of gall-stone symptoms was often satisfactory from a surgical standpoint. An overlooked carcinoma might be detected at a later exploration. Stones purposely or accidentally allowed to remain might be taken out after the patient had been built up by drainage. Adherent bands might be divided to release the gall-bladder, but broad adhesions were difficult to remove. A puncture might be made in a bladder once drained through the old adhesion with little or no danger. Finally, cholecystectomy, as advised by William J. Mayo, Löbker, Kehr, Langenbeck, and Körte, was an admirable cure for some of the unpleasant sequelæ of gall-stone work.

DR. WILLIAM J. MAYO, in closing the discussion, said he would like to call attention to one fact upon which his paper was based, namely, that uncomplicated cases of gall-stone disease gave a very small mortality; that it was the complications that produced the mortality; that most of the cases that had complications with increased mortality and with increased difficulty attending operation had had symptoms sufficiently marked long before, so that they might have been operated on at a more opportune time. This led to but one conclusion, that, instead of waiting or delaying operation, if some of the cases that came under his immediate observation had been operated earlier, complications might have been avoided. Considering the low mortality of early operations, he believed that it would only be a short time when internists would send their cases of gall-stone disease to surgeons as promptly as they do now their cases of chronic appendicitis.